

WHAT IS CLAIMED IS:

1. An electronic information system, comprising;  
at least one input device capable of receiving input from a user and generating signals in response to said input;  
5 a data storage device having data relating to the location of a plurality of entities stored therein;  
a processor, operatively connected to said at least one input device and said data storage device, said processor receiving said signals from said at least one input device, accessing said data storage device based on said signals, and retrieving selected portions of said data from said data  
10 storage device; and  
at least one output device, operatively connected to said processor, for providing said selected portions of said data retrieved by said processor to said user.
2. The electronic information system of Claim 1, wherein at least a portion of said electronic information system is disposed with an elevator car.
- 15 3. The electronic information system of Claim 2, wherein said at least one input device comprises a speech recognition system capable of recognizing the speech of said user and generating a digital representation thereof.
4. The electronic information system of Claim 3, further comprising a voice encoder/decoder (vocoder) to compress and decompress digital voice data.
- 20 5. The electronic information system of Claim 3, further comprising a controller operatively connected to said at least one input device for controlling the operation of said elevator system.
6. The electronic information system of Claim 2, wherein said at least one output device comprises a visual display which displays a visual representation of the location of at  
25 least one of said plurality of entities thereon.
7. The electronic information system of Claim 2, further comprising a network interface to an external network, said network interface being operatively connected to said at least one input device and said processor such that data present on said network may be retrieved by said processor via said network interface.

8. The electronic information system of Claim 7, wherein said at least one output device comprises a data terminal capable of transferring said data stored on said data storage device, or said data present on said network, to a personal electronic device (PED).

9. The electronic information system of Claim 6, further comprising image data stored at least in part within said data storage device, said data being selectively displayed on said visual display in response to input received from at least one user via said at least one input device.

10. The electronic information system of Claim 9, wherein said at least one input device comprises a speech recognition system capable of recognizing the speech of said user and generating a digital representation thereof.

11. The electronic information system of Claim 10, further comprising a data library having a plurality of data entries associated therewith, wherein at least a portion of said image data is retrieved and displayed on said visual display when said digital representation generated by said speech recognition system has a first predetermined relationship to at least one of said data entries within said data library.

12. The electronic information system of Claim 11, wherein said at least portion of said image data displayed on said visual display is chosen based on a second predetermined relationship between said digital representation generated by said speech recognition system and said at least one data entry within said data library.

13. A transportation system, comprising;  
a transport device capable of moving at least one person between a first location and a second location;

at least one data source capable of providing a plurality of types of data;

at least one input device disposed within said transport device, said at least one input device allowing said at least one person to select between at least two of said plurality of types of data, said at least one input device generating a first signal based on said selection;

at least one processor operatively connected to said at least one input device and said at least one data source, said processor receiving at least one of said plurality of types of data from said at least one data source based on said first signal; and

at least one display device disposed on or within said transport device, said at least one display device operatively connected to said at least one processor so as to display to said at least one person said at least one type of data received by said at least one processor.

14. The transportation system of Claim 13, wherein said transport device comprises  
5 an elevator car.

15. The transportation system of Claim 14, wherein said at least one data source comprises a network capable of transferring data from one network entity to another.

16. The transportation system of Claim 15, wherein said data network is the Internet.

17. The transportation system of Claim 13, wherein said at least one data source  
10 comprises at least one sensor mounted remotely from said transport device.

18. The transportation system of Claim 17, wherein said at least one sensor comprises an imaging device.

19. The transportation system of Claim 18, wherein said at least one sensor further comprises a motion detector.

20. The transportation system of Claim 13, further comprising a controller operatively  
15 connected to said at least one input device, said controller being capable of controlling at least one function outside of said transport device based on inputs from said at least one person.

21. The transportation system of Claim 20, wherein said at least one function includes the lighting level in a location selected by said at least one person via said at least one input  
20 device.

22. The transportation system of Claim 13, further comprising;  
an algorithm running on said at least one processor, said algorithm being capable of analyzing information provided by said at least one person via said at least one input device and generating a second signal based at least partly thereon; and

25 a data storage device operatively coupled to said processor, said data storage device having a plurality of types of data stored therein;

wherein said second signal determines at least in part the type of data retrieved from said data storage device by said processor.

23. A method of providing information to an occupant of a transport device,  
30 comprising;

providing an input device which is accessible to said occupant, said input device being operatively connected to a data storage device and a processor;

inputting information to said processor via said input device;

retrieving data from a data source based on said information input to said processor; and

5 providing said data to said occupant.

24. The method of Claim 23, further comprising the act of converting said information received via said input device from an analog to a digital format.

25. The method of Claim 24, wherein said data is in a compressed format, and the act of providing said data to said occupant comprises converting said data to an analog form and  
10 generating audible sounds based on said analog form using an audio speaker.

26. The method of Claim 24, wherein the act of retrieving data comprises accessing a data network operatively connected to said processor.

27. A method of operating an elevator system having at least one elevator car, comprising;

15 providing at least one sensor within said at least one elevator car;

estimating the number of occupants within said elevator car using said at least one sensor;

comparing said estimated number of occupants to a predetermined number;

generating a signal when the estimated number of occupants equals or exceeds  
20 said predetermined number; and

causing said elevator car to bypass one or more floors calling for said elevator car based on said signal.

28. The method of Claim 27, wherein the act of estimating further comprises;

sensing the weight of entities carried within said elevator car using a plurality of  
25 sensors;

sensing the spatial distribution of said weight within said elevator car using said plurality of sensors; and

sensing the number of different floors selected by said occupants of said elevator car.

29. The method of Claim 27, wherein the act of estimating further comprises;

calculating an estimate of the maximum number of occupants based on data received from said plurality of sensors;

calculating an estimate of the minimum number of occupants based on data received from said plurality of sensors; and

5 selecting the higher of said estimate of the maximum number, said estimate of the minimum number, and the number of different floors selected by said occupants.

30. An access control system, comprising;

a transport device capable of transporting at least one person between a first location and a second location, the access to said second location being authorized for only a limited number  
10 of persons;

a signal emitter capable of emitting electromagnetic energy of a first frequency, said electromagnetic energy including first data identifying said at least one person;

a sensor disposed in proximity to said transport device, said sensor capable of receiving said electromagnetic energy and said first data included therewith, and recognizing said first  
15 data;

a first database containing second data relating to said limited number of persons;

a processor, operatively connected to said sensor and said first database; said processor being capable of processing said first data, and said second data retrieved from said first database;

20 wherein said processor compares said first data to said second data to determine if said at least one person is authorized to access said second location.

31. The system of Claim 30, further comprising a first input device, said first input device operatively connected to said processor, said first input device allowing said at least one person to perform at least one function when said at least one person is authorized to access said  
25 second location.

32. The system of Claim 31, further comprising:

an algorithm running on said processor;

a second database operatively coupled to said processor, said second database comprising security data relating to a plurality of persons;

wherein said algorithm compares information entered via a second input device to portion of said security data, said portions being selected based on said first data, and denies access to said at least one person when said information entered via said second input device does not match said portions of said security data.

5        33.     The system of Claim 30, wherein said transport device is an elevator system.

34.     The system of Claim 33, further comprising a first input device, said first input device operatively connected to said processor, said first input device allowing said at least one person to perform at least one function when said at least one person is authorized to access said second location.

10       35.     The system of Claim 33, wherein said signal emitter and said sensor comprise a direct sequence spread spectrum (DSSS) communication system.

36.     (An) method of providing information to the passengers of a transport device, comprising:

obtaining data relating to at least one of said passengers;

15       retrieving stored information based on said data;

displaying at least a portion of said stored information on at least one display device viewable by said at least one passenger.

37.     The method of Claim 36, wherein said transport device comprises an elevator car, and the act of displaying is performed using at least one display device which is viewable by the  
20 passengers riding said elevator car.

38.     The method of Claim 37, wherein the act of obtaining data comprises analyzing the selections made by said at least one passenger via an input device.

39.     The method of Claim 37, wherein the act of obtaining data relating to at least one of said passengers comprises sampling the speech of said at least one passenger.

25       40.     The method of Claim 38, wherein the act of retrieving comprises retrieving a graphic data file from a data storage device.